

FIG. 1
PRIOR ART

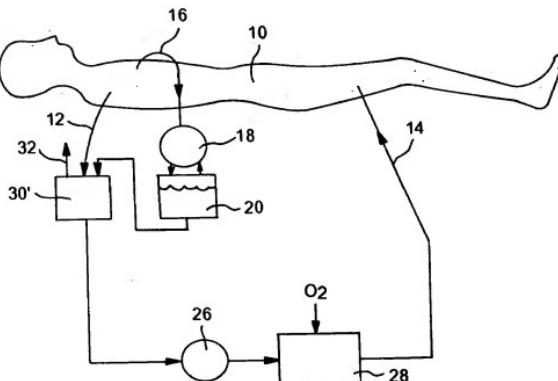


FIG. 2
PRIOR ART

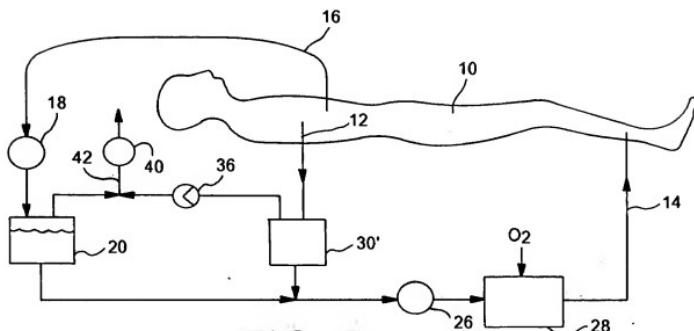


FIG. 3

PRIOR ART

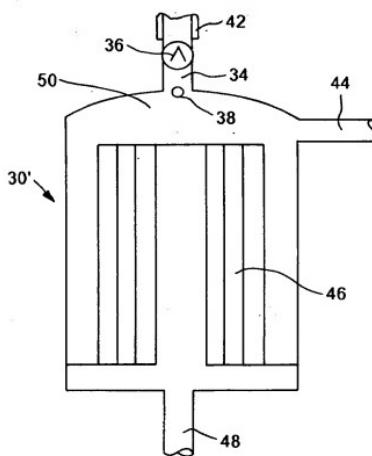
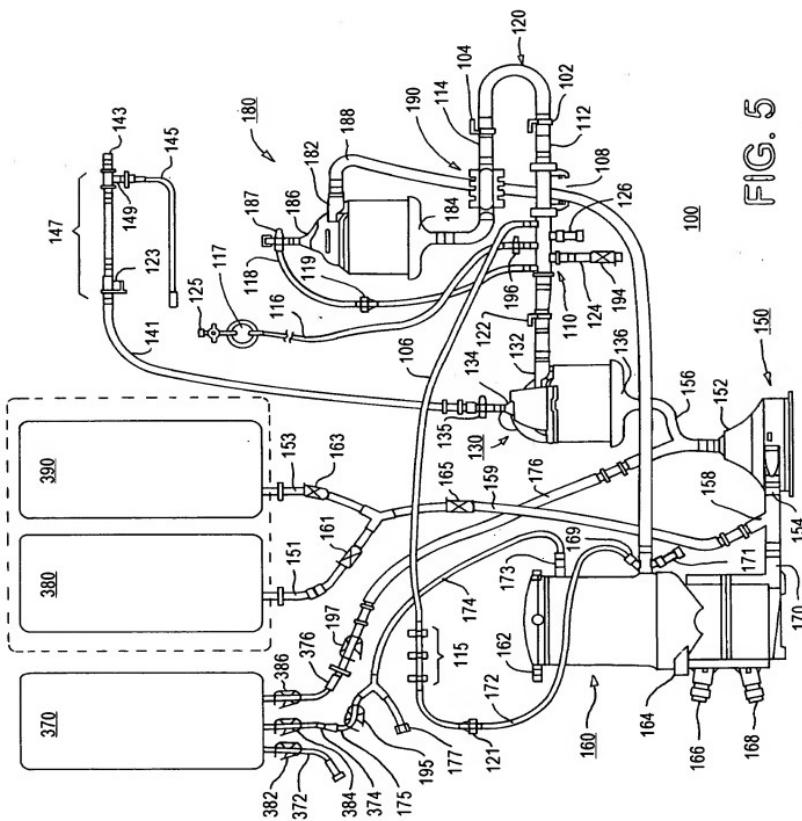


FIG. 4

PRIOR ART



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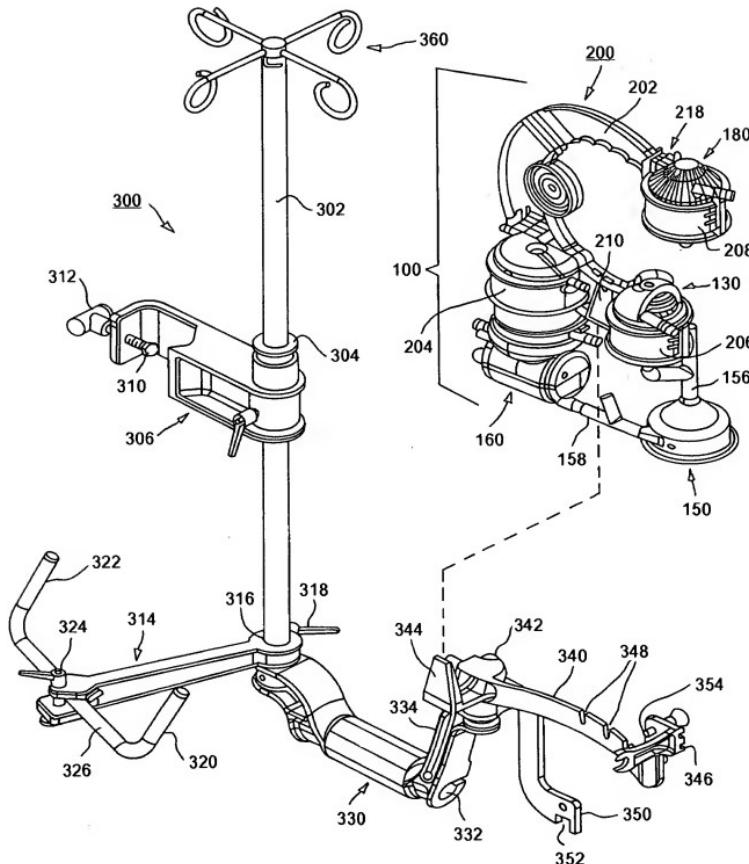


FIG. 6

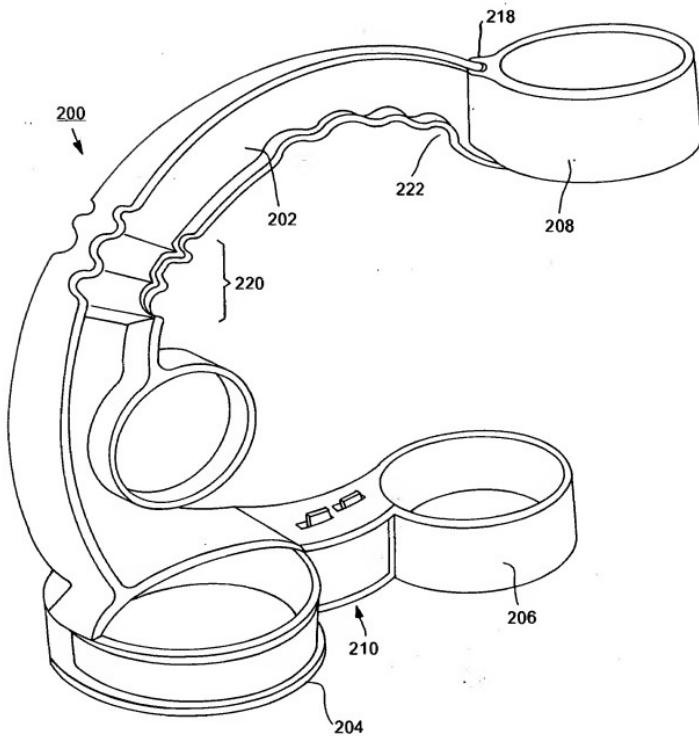
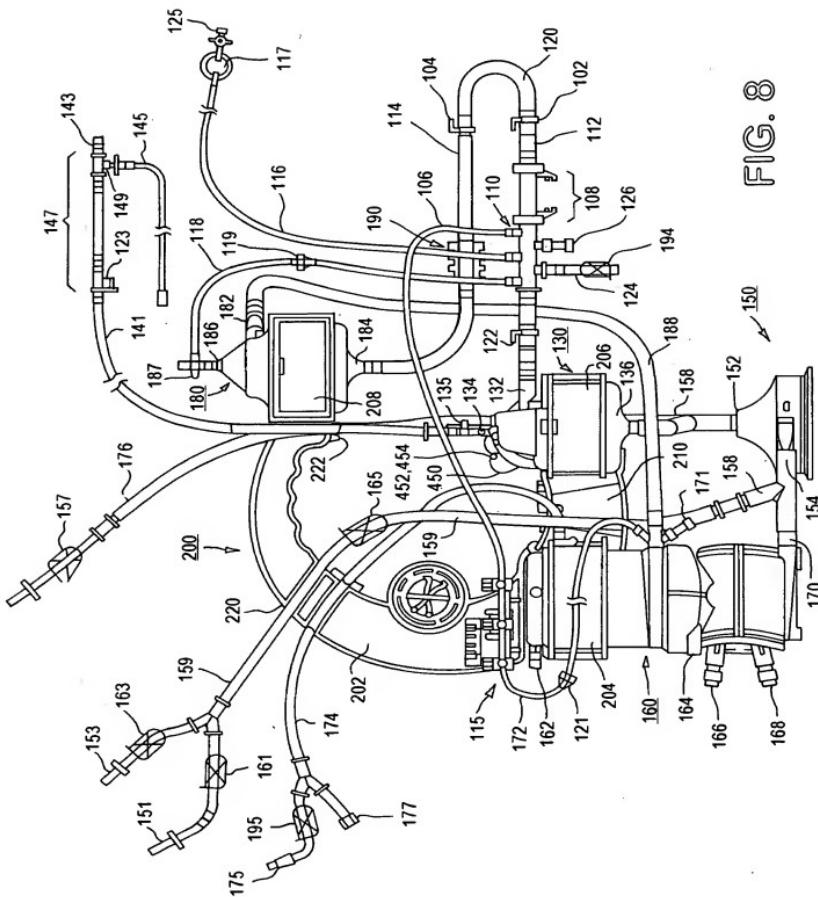
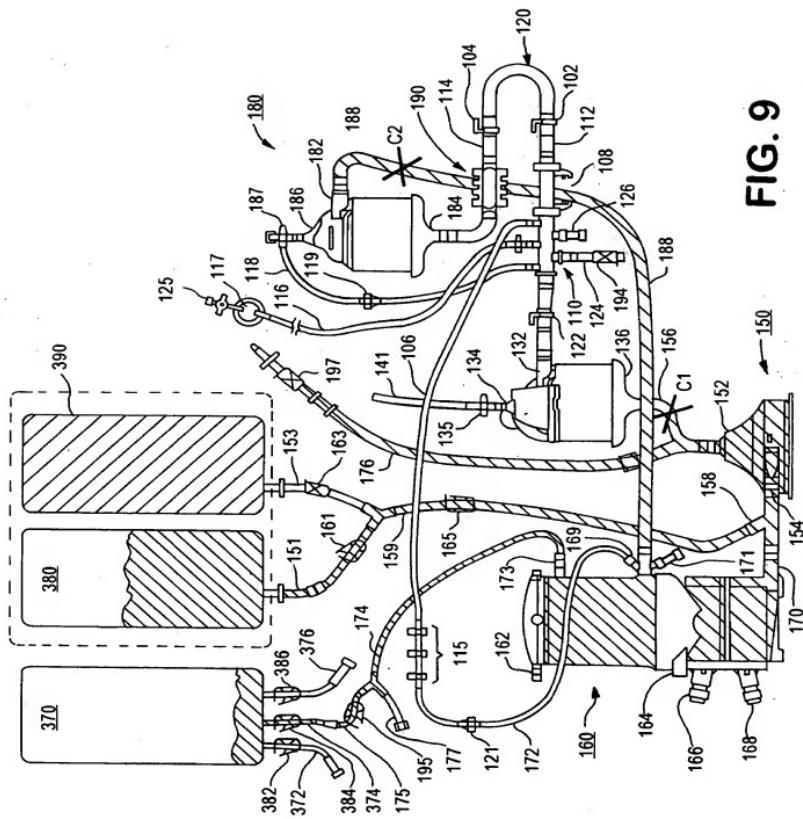
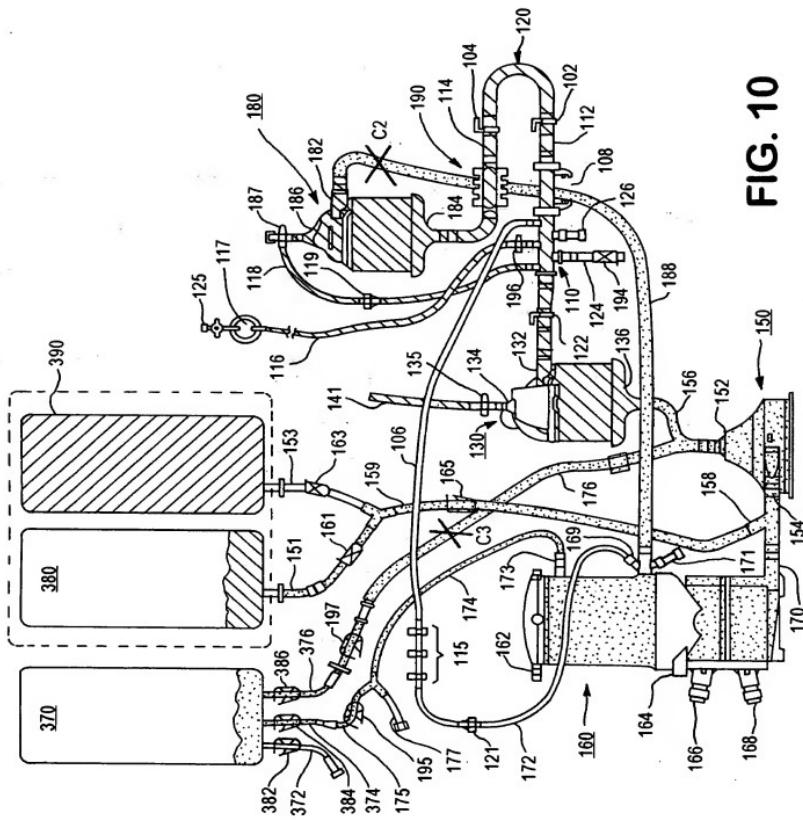


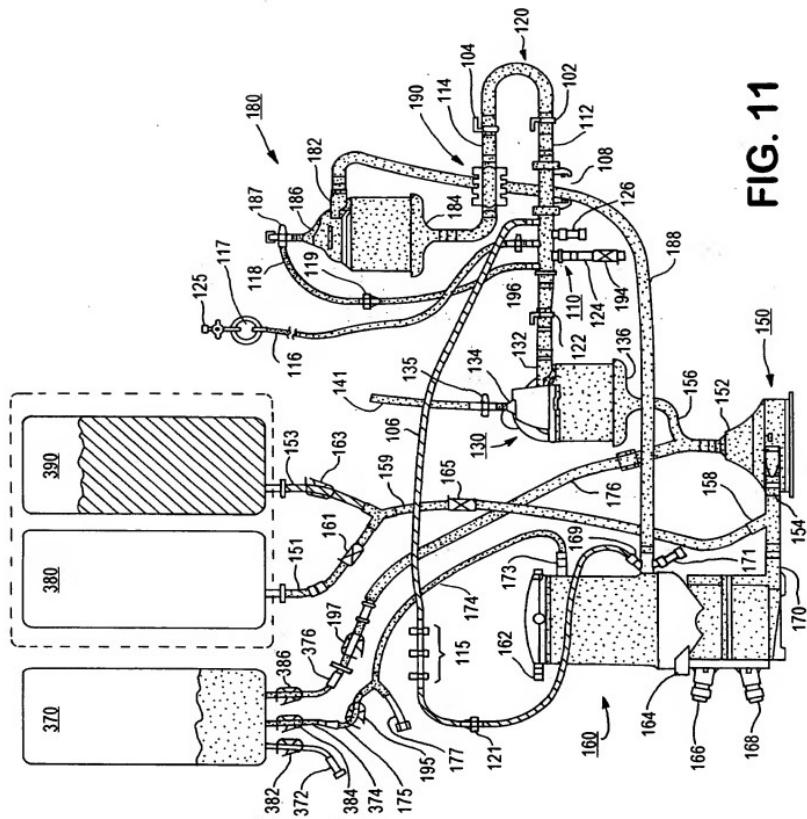
FIG. 7

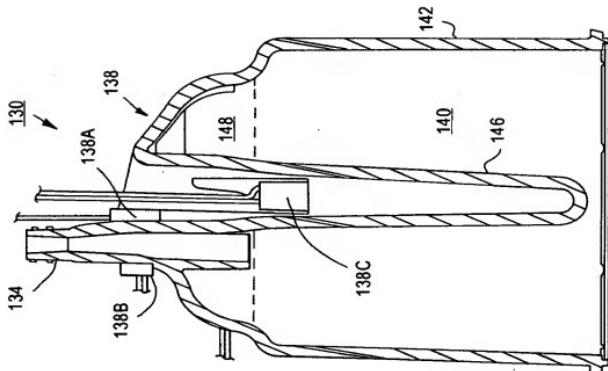
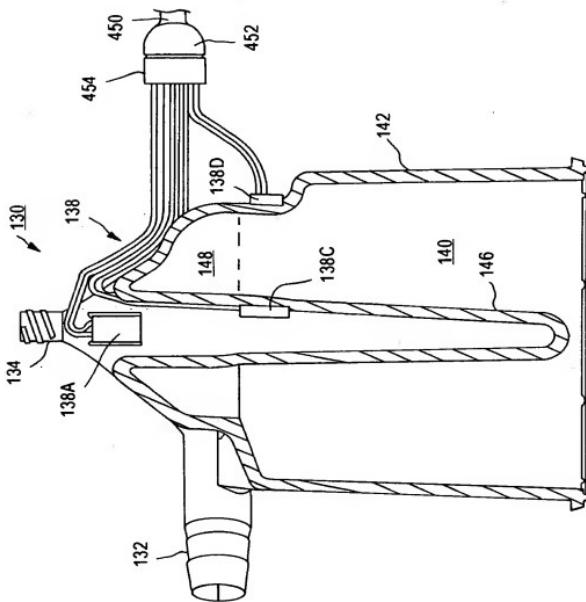


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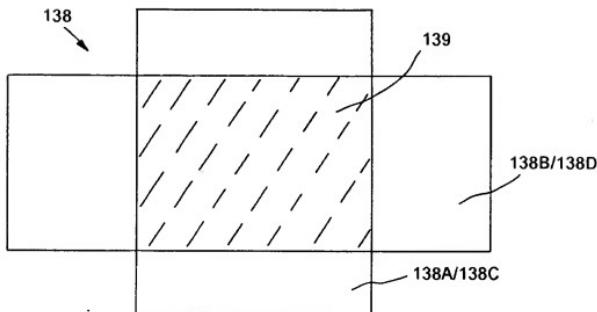
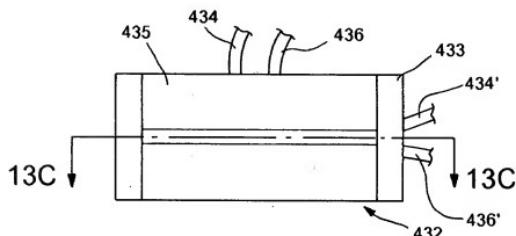
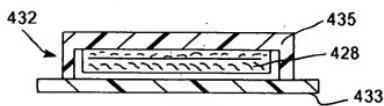


FIG. 13A



138A, 138B, 138C, 138D

FIG. 13B



138A, 138B, 138C, 138D

FIG. 13C

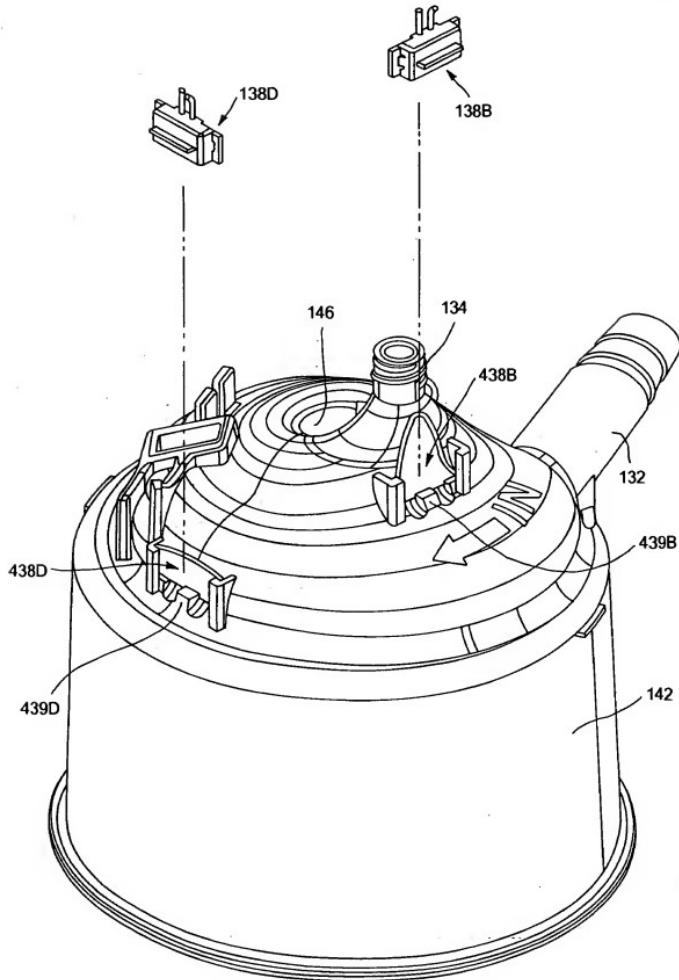


FIG. 13D

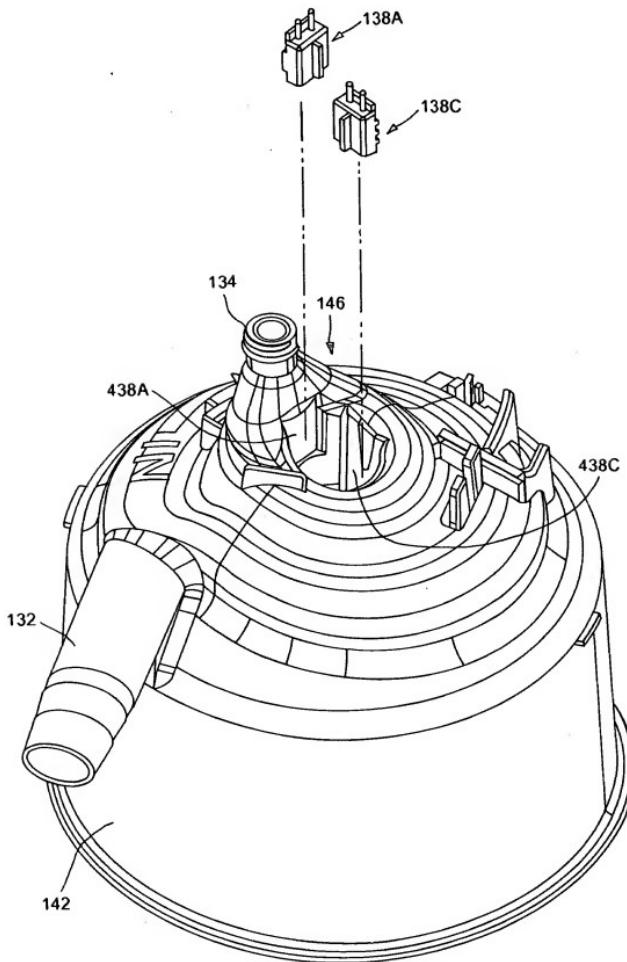


FIG. 13E

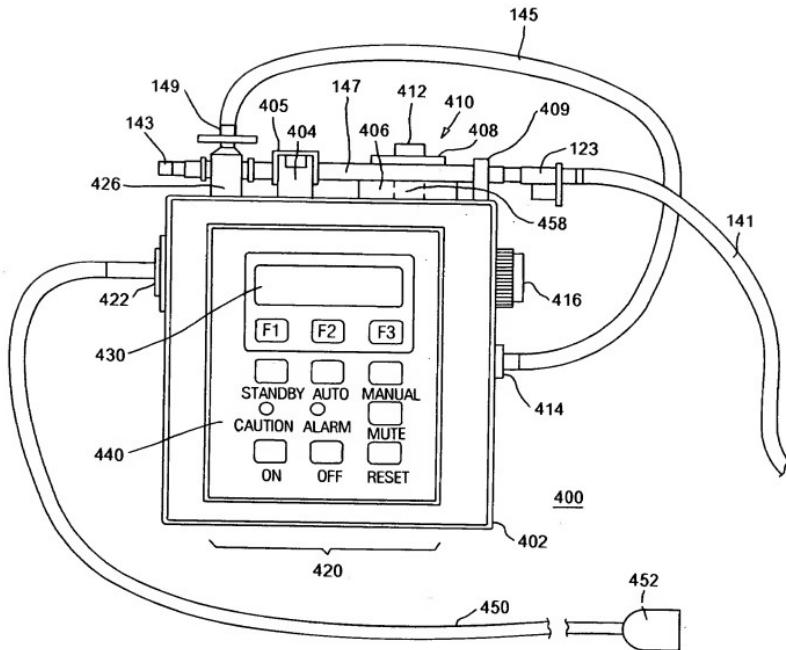


FIG. 14

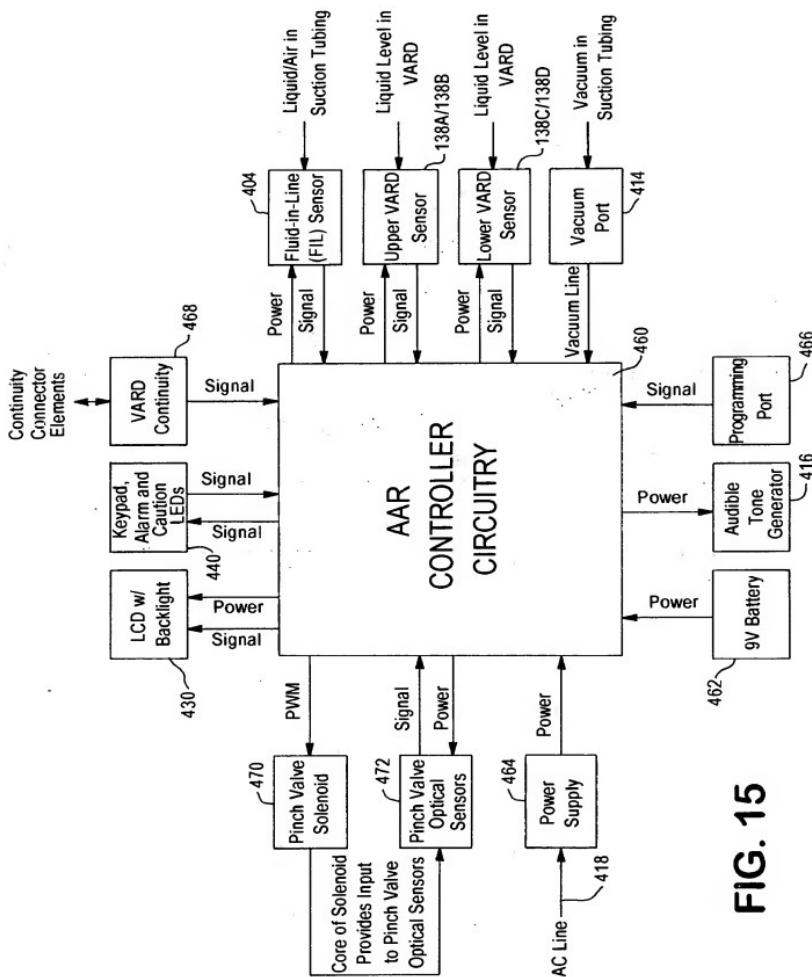


FIG. 15

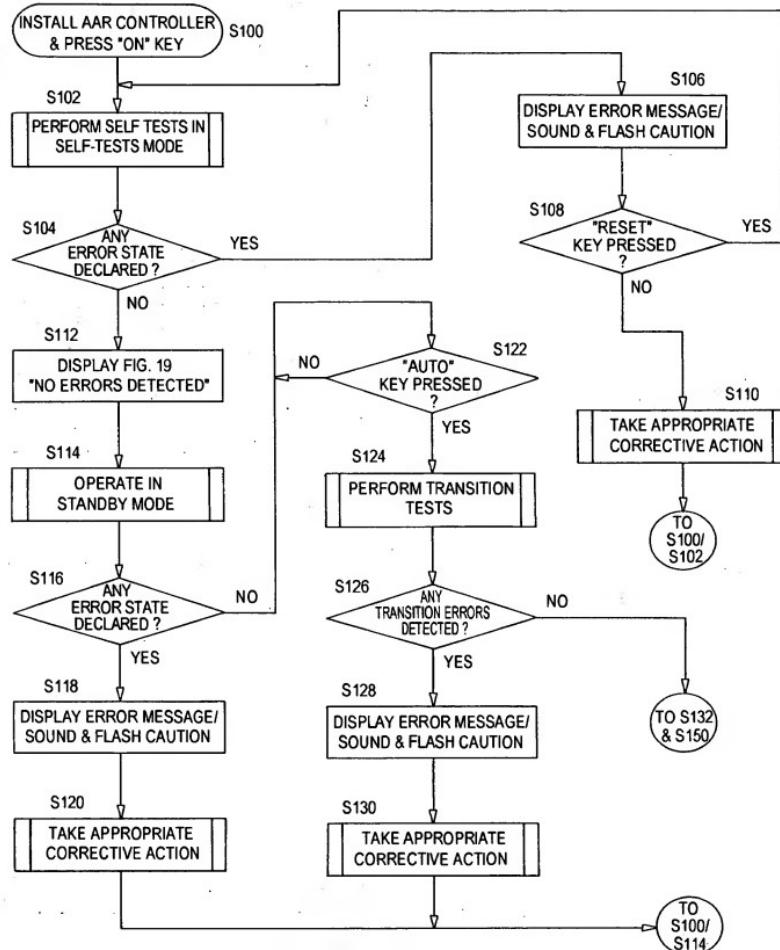


FIG. 16A

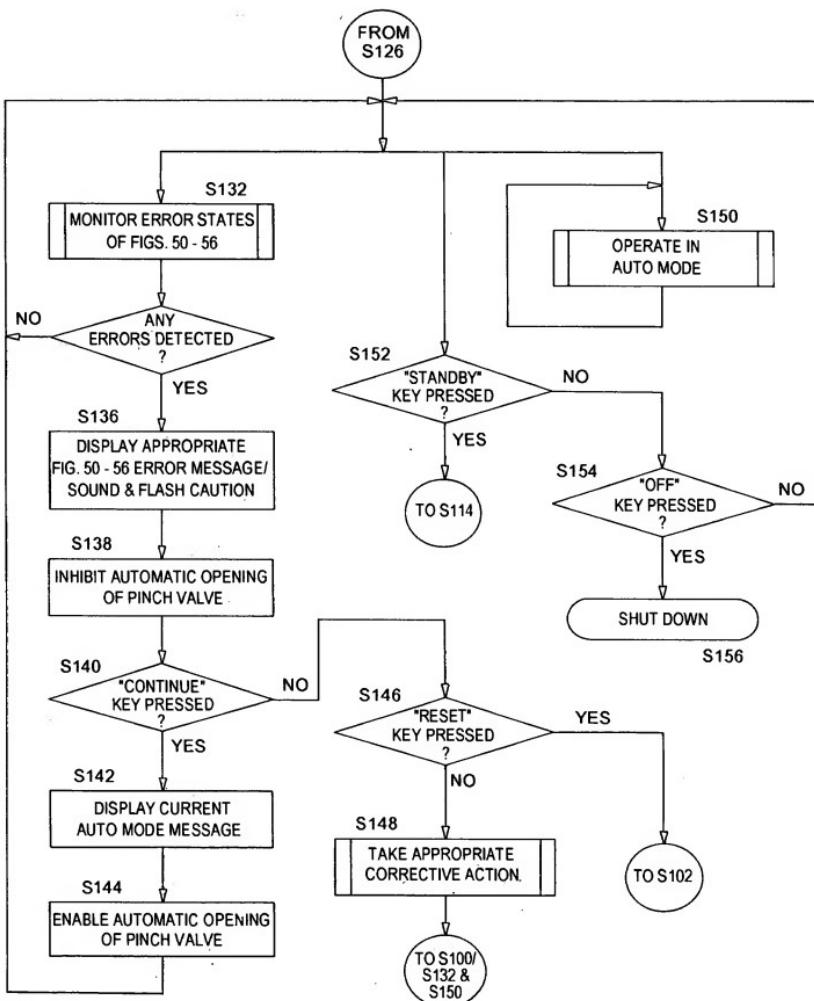


FIG. 16B

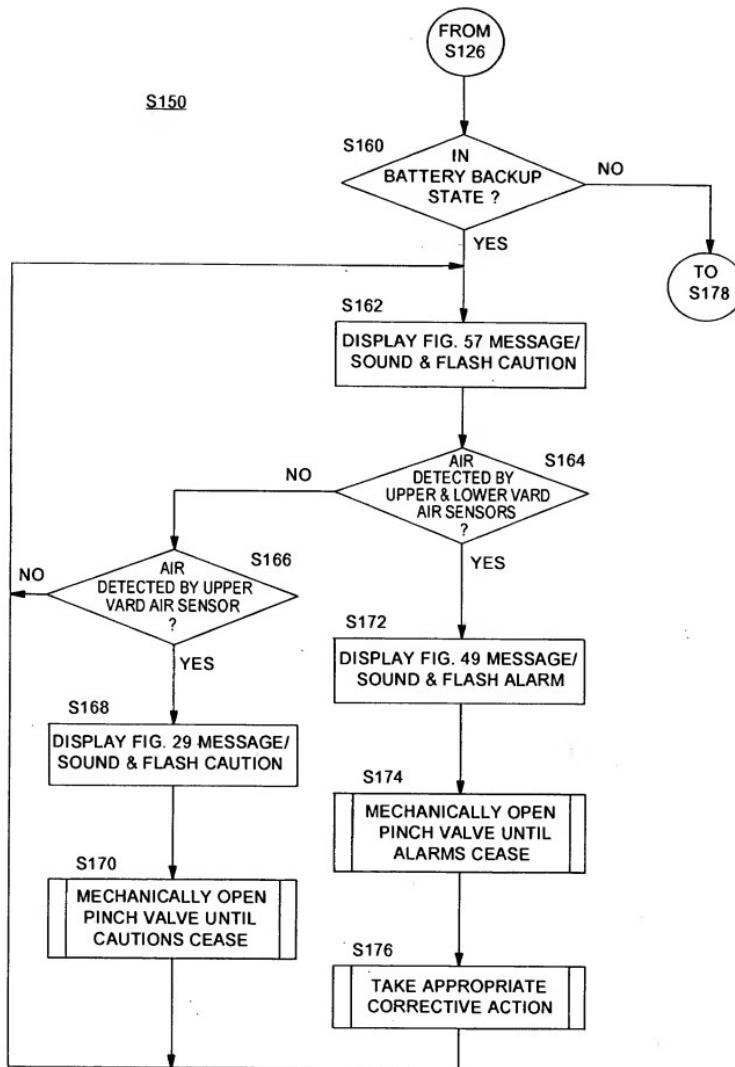


FIG. 17A

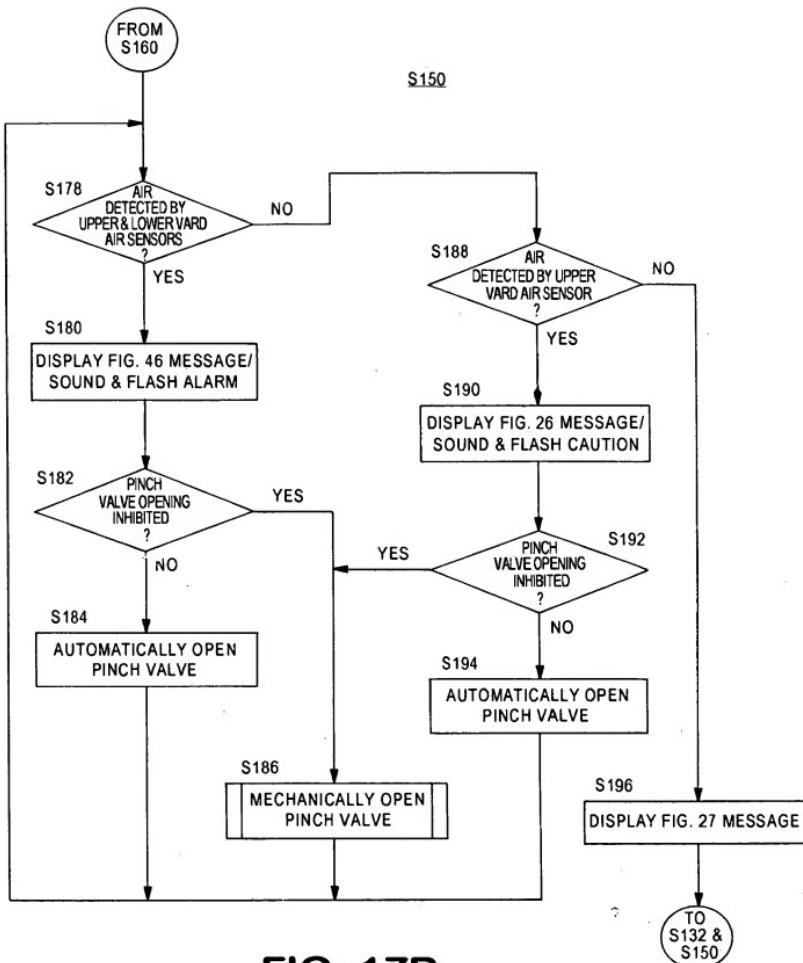


FIG. 17B

FIRMWARE VERSION X.XX
PERFORMING SELF TEST

FIG. 18

SELECT LANGUAGE
ENGLISH

< > SELECT

FIG. 22

SELF TEST COMPLETE
NO ERRORS DETECTED

FIG. 19

FLUID SENSOR TEST
SENSOR STATUS
AIR

RETURN

FIG. 23

VALVE CLOSED
STANDBY MODE
SYSTEM READY
MENU

FIG. 20

FLUID SENSOR TEST
SENSOR STATUS
FLUID

RETURN

FIG. 24

LANG SENSOR RETURN

FIG. 21

VALVE OPEN
STANDBY MODE
SYSTEM READY
MENU

FIG. 25

VALVE OPEN
STANDBY MODE
BATTERY BACKUP ON
MENU

FIG. 26

SELF TEST COMPLETE
CRC FAILURE
REPLACE AAR CONTROLLER

FIG. 30

VALVE CLOSED
AUTOMATIC MODE

FIG. 27

SELF TEST COMPLETE
VALVE STUCK OPEN
REPLACE AAR CONTROLLER

FIG. 31

VALVE OPEN
AUTOMATIC MODE
AIR IN VARD

FIG. 28

SELF TEST COMPLETE
VALVE STUCK CLOSED
REPLACE AAR CONTROLLER

FIG. 32

MANUAL OPERATION
OPEN THE VALVE

FIG. 29

SELF TEST COMPLETE
AAR CONTROLLER FAILURE
REPLACE AAR CONTROLLER

FIG. 33

SELF TEST COMPLETE
LOW BATTERY

CONTINUE ?

VALVE CLOSED
STANDBY MODE
AIR IN VARD

MENU

FIG. 34

FIG. 38

SELF TEST COMPLETE
NO BATTERY BACKUP

CONTINUE ?

VALVE CLOSED
STANDBY MODE
LOW SUCTION

MENU

FIG. 35

FIG. 39

SELF TEST COMPLETE
BATTERY BACKUP ON

CONTINUE ?

VALVE CLOSED
STANDBY MODE
BATTERY BACKUP ON

MENU

FIG. 36

FIG. 40

VALVE CLOSED
STANDBY MODE
VARD NOT CONNECTED

MENU

VALVE CLOSED
STANDBY MODE
LOW BATTERY

MENU

FIG. 37

FIG. 41

VALVE CLOSED
STANDBY MODE
NO BATTERY BACKUP
MENU

FIG. 42

AAR CONTROLLER FAILURE
REPLACE AAR CONTROLLER

FIG. 46

VARD NOT CONNECTED
CONTINUE ?

FIG. 43

LOW SUCTION
CONTINUE ?

FIG. 47

CHECK VALVE TUBING
CONTINUE ?

FIG. 44

VALVE OPEN
TOO MUCH AIR
ENTERING VARD

FIG. 48

CHECK VARD SENSORS
CONTINUE ?

FIG. 45

MANUAL OPERATION
OPEN THE VALVE

FIG. 49

AUTOMATIC MODE
VALVE STUCK OPEN

CONTINUE ?

FIG. 50

AUTOMATIC MODE
VARD SENSOR FAILURE

CONTINUE ?

FIG. 54

AUTOMATIC MODE
VALVE FAILURE

CONTINUE ?

VALVE CLOSED
AUTOMATIC MODE
LOW SUCTION

FIG. 51

FIG. 55

AUTOMATIC MODE
VALVE STUCK CLOSED

CONTINUE ?

AUTOMATIC MODE
VARD NOT CONNECTED

CONTINUE ?

FIG. 52

FIG. 56

SYSTEM FAILURE
BLOOD BEING REMOVED

CONTINUE ?

AUTOMATIC MODE
BATTERY BACKUP ON

FIG. 53

FIG. 57